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[71]申请人 张正国

地址 518001 广东省深圳市罗湖区宝安南路松园南9巷8栋604

[72]发明人 张正国

[74]专利代理机构 深圳市顺天达专利商标代理有限公司

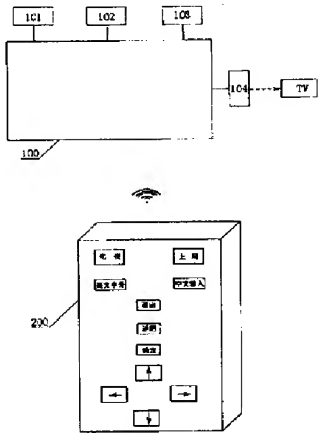
代理人 郭伟刚

权利要求书2页 说明书7页 附图页数4页

[54]发明名称 一键通电视上网系统

[57]摘要

一键通电视上网系统，包括带有网络访问设备端口和电视端口的 转换接口装置以及可与转换接口装置进行数据通信的遥控器装置，采用一键式操作，通过遥控器按下“上网”键，就可实现连接互连 网，同时在电视机上显示预先确定的网页分类，通过编辑操作选择 具体选择要访问的网页，由于将所述可访问的网页通过树形结构加 以组织，使得可访问的网络内容是可以控制的，同时，也可以增加 新的网站地址存储起来作为补充，使得互连网象电视机一样进入千 家万户成为可能。

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# 权利要求书

1、一键通电视上网系统，其特征在于，包括带有有线电视线路接口、电话线接口或无线接收接口及各类接口的转换接口装置、可与所述转换接口装置进行数据通信的遥控器装置，所述转换接口装置有视频/射频输出端口与电视机连接，所述转换接口装置包括 CPU 以及连接该 CPU 输入端口的遥控接收单元，所述 CPU 接有存储器单元，所述 CPU 的输入/出端口分别通过各自转换模块连接到有线电视线路接口、电话线接口或无线接收接口，同时通过数字（IP）/视频（TV）转换单元连接到电视机连接端口，所述转换接口装置在接收到遥控器信号时，执行以下步骤：对遥控器命令进行分析，如果是“上网”命令则显示初始画面，通过有线电视线路接口、电话线接口或无线接收接口及各类接口建立与主网站的连接并将主网站的首页转换成电视机可显示的信号，通过视频/射频接口传送到电视机；如果是确认命令则通过有线电视线路接口、电话线接口或无线接收接口及各类接口发送当前光标所在位置对应的网址到互联网上；如果是编辑命令，则根据命令内容移动光标位置，并将移动后光标所对应网址连接通过有线电视线路接口、电话线接口或无线接收接口发送当前光标所在位置对应的网址到互联网上，并通过所述有线电视线路接口、电话线接口或无线接收接口及各类接口与互联网进行信息交互。

2、根据权利要求 1 所述一键通电视上网系统，其特征在于，所述主网站上的首页是按一定分类规则按顺序排列的指向下一级首页的链接。

3、根据权利要求 1 所述一键通电视上网系统，其特征在于，所述主网站链接的下一级的首页是按一定分类规则按顺序排列的指向下一级首页的链接，如此类推直至进入所需网站。

4、根据权利要求 1 所述一键通电视上网系统，其特征在于，所述主网站的首页地址可以预存或加入在所述转换接口装置的存储单元内。

5、根据权利要求 1 所述一键通电视上网系统，其特征在于，所述遥控器包括一个保存按键，按下该按键时，所述转换接口装置将当前网址存储在存储单元中，待下次进入时可在存储单元中直接调用。

6、根据权利要求 1 所述一键通电视上网系统，其特征在于，所述遥控器还包括“电视”功能按键，按下该按键时，所述转换接口装置将切断与网站的连接使之恢复到电视机（TV）工作状态。

7、根据权利要求 1 所述一键通电视上网系统，其特征在于，所述遥控器还包括字符/汉字输入按键。

8、根据权利要求 1 所述一键通电视上网系统，其特征在于，所述编辑命令包括上、下、左、右按键，上翻页、下翻页命令和回到首页以及根据实际需要设置的按键。

00.07.26

# 说 明 书

## 一键通电视上网系统

本发明涉及网络接口和电视技术,更具体地说,涉及一种可大大简化通过电视上网操作的系统。

互连网越来越多地与人们的生活工作关联，现有技术中，为实现通过电视机来访问互连网，除需配置机顶盒硬件外，使用过程还需要用户记住一系列复杂的操作步骤，使得缺少计算机知识或文化水平较低者无法方便地使用互连网。

本发明的目的在于提供一种通过电视机上网的一键通电视上网系统，这种一键通电视上网系统，可以克服现有技术的上述缺点，利用这种系统上网，可以大大简化操作步骤，使得网络生活真正走入千家万户。

本发明的目的是这样实现的，构造一种一键通电视上网系统，包括带有有线电视线路接口、电话线接口或无线接收接口及各类接口的转换接口装置、可与所述转换接口装置进行数据通信的遥控器装置，所述转换接口装置有视频/射频输出端口与电视机连接，所述转换接口装置包括 CPU 以及连接该 CPU 输入端口的遥控接收单元，所述 CPU 接有存储器单元，所述 CPU 的输入/出端口分别通过各自转换模块连接到有线电视线路接口、电话线接口或无线接收接口及

各类接口，同时通过数字/视频转换单元连接到电视机连接端口，所述转换接口装置在接收到遥控器信号时，执行以下步骤：对遥控器命令进行分析，如果是“上网”命令则显示初始画面，通过有线电视线路接口、电话线接口或无线接收接口及各类接口建立与主网站的连接并将主网站的首页转换成电视机可显示的信号通过视频/射频接口传送到电视机；如果是确认命令则通过有线电视线路接口、电话线接口或无线接收接口及各类接口发送当前光标所在位置对应的网址到互连网上；如果是编辑命令，则根据命令内容移动光标位置，并将移动后光标所对应网址连接通过有线电视线路接口、电话线接口或无线接收接口及各类接口发送当前光标所在位置对应的网址到互连网上，并通过所述有线电视线路接口、电话线接口或无线接收接口及各类接口与互连网进行信息交互，其中，每一个显示信息和数据预先暂存在所述转换接口装置的存储器内。

按照本发明提供的一键通电视上网系统，其特征在于，所述主网站上的首页是按一定分类规则按顺序排列的指向下一级首页的链接。

按照本发明提供的一键通电视上网系统，其特征在于，所述主网站链接的下一级的首页是按一定分类规则按顺序排列的指向下一级首页的链接，如此类推直至进入所需网站。

按照本发明提供的一键通电视上网系统，其特征在于，所述主网站的首页地址可以预存或加入在所述转换接口装置的存储单元内。

按照本发明提供的一键通电视上网系统，其特征在于，所述遥控器包括一个保存按键，按下该按键时，所述转换接口装置将当前网址存储在存储单元中。

按照本发明提供的一键通电视上网系统，其特征在于，所述遥控器还包括“电视”功能按键，按下该按键时，所述转换接口装置将切断与电视机的连接使之恢复到电视机工作状态。

按照本发明提供的一键通电视上网系统，其特征在于，所述遥控器还包括字符/汉字输入按键。

按照本发明提供的一键通电视上网系统，其特征在于，所述编辑命令包括上、下、左、右按键，上翻页、下翻页命令以及回到首页，所述每一个编辑命令对应于一个遥控器上的按键。

实施本发明的一键通电视上网系统，具有以下优点：由于采用一键式操作，只要通过遥控器按下“上网”按键，就可实现连接互连网，同时在电视机上显示预先确定的网页分类，通过编辑操作选择具体选择要访问的网页，由于将所述可访问的网页通过树形结构加以组织，使得可访问的网络内容是可以控制的，同时，也可以增加新的网站地址存储起来作为补充。实施本发明的系统，可以使得互连网象电视机一样进入千家万户成为可能。

下面，结合附图和实施例，进一步说明本发明的特点，附图中：

图 1 是本发明的一键通电视上网系统实施例简图；

图 2 是本发明的一键通电视上网系统中转换接口装置的组成方框图；

图 3 是本发明的一键通电视上网系统中遥控器的组成方框图；

图 4—图 8 是说明使用本发明的一键通电视上网系统上网过程的示意图。

如图 1 所示，本发明的一键通电视上网系统包括硬件和软件两部分，其中，硬件部分包括转换接口装置 100 和遥控器 200，两者结合一起，主要解决网络接入、人机对话和数据存储问题，和软件结合一起，具体实现功能包括：1）通过电话线、有线电视宽频或无线上网及各类可上网方式接入到一个互连网门户网站，也可以提供接入多个中央网站功能；2）预存其它网站地址或补充存储新的网站地址；3）通过简单的指向操作，根据网站索引进入具体的网页进行相应的浏览。

1、转换接口装置

如图 1 所示，转换接口装置 100 包括用于连接互连网的有线电视线路接口 101、电话线接口 102 或无线接收接口 103，还包括用于连接电视机的视频/射频输出端口 104，如图 2 所示，转换接口装置包括 CPU 201 以及连接该 CPU 201 输入端口的遥控接收单元 202，所述 CPU 接有存储器单元 203，所述 CPU 201 的输入/出端口通过转换单元 204 连接到有线电视线路接口 101，通过转换单元 205 连接到电话线接口 102，通过转换单元 206 连接到无线接收接口 103，通过数字（IP）/视频（TV）转换单元 207 连接到电视机连接端口 104。

2、遥控器

遥控器是本发明系统中实现人机对话的一个重要环节，用于发送

用户的指示给转换接口装置，这种接口装置为实现与转换接口装置进行数据通信，如图 3 所示，设置有按键 301、红外发射单元 302、CPU303 及存储单元 304 以及电池供电单元 305，按键单元包括 301 包括 1）功能指示按键如“上网”、“电视”等；2）状态转换按键，如“字母”、“汉字”、“退出”、“返回”等；3）屏幕编辑按键，如“←”、“↑”、“→”和“↓”等。当在接通工作电源情况下，按下面板上其中一个按键后，CPU 根据按下键位置，从存储单元中取出对应的编码，通过红外发送单元发射出去。

3、软件

通过转换接口和遥控器上的软件，本发明的系统可以实现以下功能：

（1）状态切换

转换接口装置在接收到遥控器发来的“上网”命令信号时，显示如图 4 所示的初始画面，通过有线电视线路接口、电话线接口或无线接收接口及各类接口建立与主网站的连接并将主网站的首页转换成电视机可显示的信号，通过视频/射频接口传送到电视机，在电视机上显示出来。

转换接口装置在接收到遥控器发出的“电视”命令信号时，切断与互连网的连接，使得电视机回到上网前的“射频”或 AV 状态。

（2）网络访问功能

A）　屏幕编辑命令

网络访问有一个寻找目标的过程，这个过程是结合屏幕显示内

容，通过按下遥控器上的屏幕编辑指向命令按键来实现的,这里主要有上箭头、下箭头、左箭头、右箭头等四个按键来实现的。转换接口装置接收到遥控器的屏幕编辑命令后，则根据命令内容移动光标位置，并将移动后光标所对应网址连接通过有线电视线路接口、电话线接口或无线接收接口及各类接口发送当前光标所在位置对应的网址到互联网上，并通过所述有线电视线路接口、电话线接口或无线接收接口及各类接口与互联网进行信息交互。

B）站点、页面返回命令

按下遥控器上“返回”按键发出站点、页面返回命令，可以回到上一个页面或上一个网站。

C）访问确认命令

当通过遥控器在屏幕上进行访问选择时，如果选择结束，则可按下遥控器上“确定”按键，这样，转换接口装置识别出确认命令后，通过有线电视线路接口、电话线接口或无线接收接口及各类接口发送当前光标所在位置对应的网址到互联网上。

4、互连网支持

为实现本发明系统的功能，需要设计一个互连网支持系统。首先，需要一个顶级的网站首页，该页面上可以将网站分成国内网站和国外网站两类，换言之，顶级网页按国内、国外排列出指向国内网站的链接和指向国外网站的链接。其他每个级别的网站（页）上的首页是按一定分类规则按顺序排列的指向下一级首页的链接。所述主网站链接的下一级的首页是按一定分类规则按顺序排列的指向下一

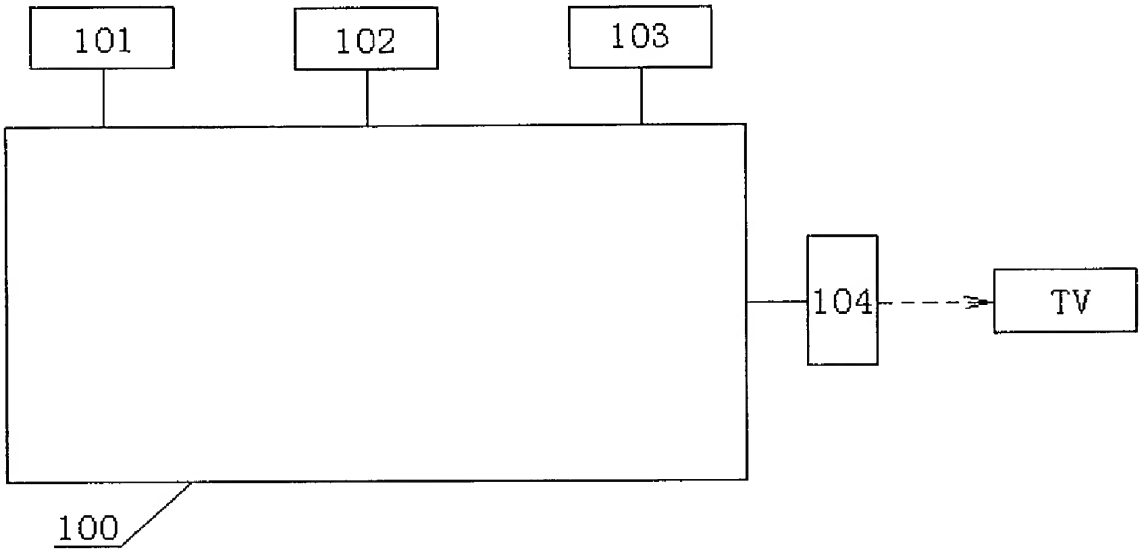
级首页的链接，如此类推直至进入所需网站。其中，顶级主网站的首页地址可以预存或加入在所述转换接口装置的存储单元内。

5、其他

遥控器还可以设置一个保存按键，按下该按键时，所述转换接口装置将当前网址存储在存储单元中，待下次进入时可在存储单元中直接调用，从而提高访问速度。

所述遥控器还包括字符/汉字输入按键，用于配合电视屏幕和遥控器屏幕选择按键，输入英文数字和中文。

例如在屏幕显示如图 4 情况下，将光标移到“国内网站”并按下“确认”键，便可进入如图 5 所示屏幕，此时操作遥控器，移动光标到“教育”并按下“确认”键，此时，便可进入如图 6 所示屏幕，此时，通过操作遥控器移动光标到“幼儿教育”并按下“确认”键，便可进入如图 7 所示地址选择的屏幕，此时选择“北京”，便可进入如图 8 所示网站首页。



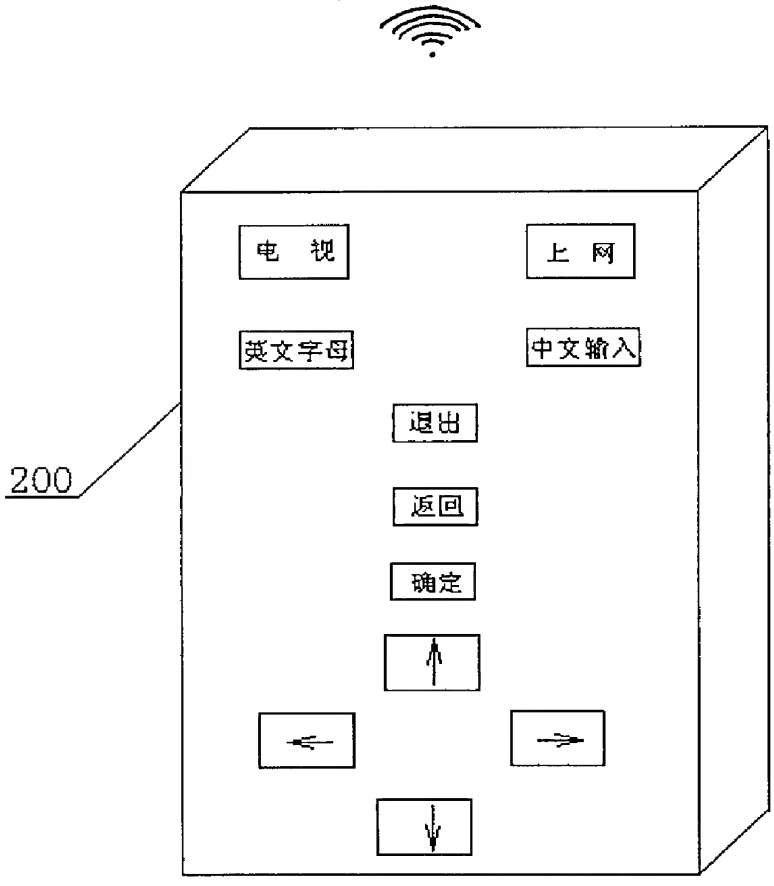




图1

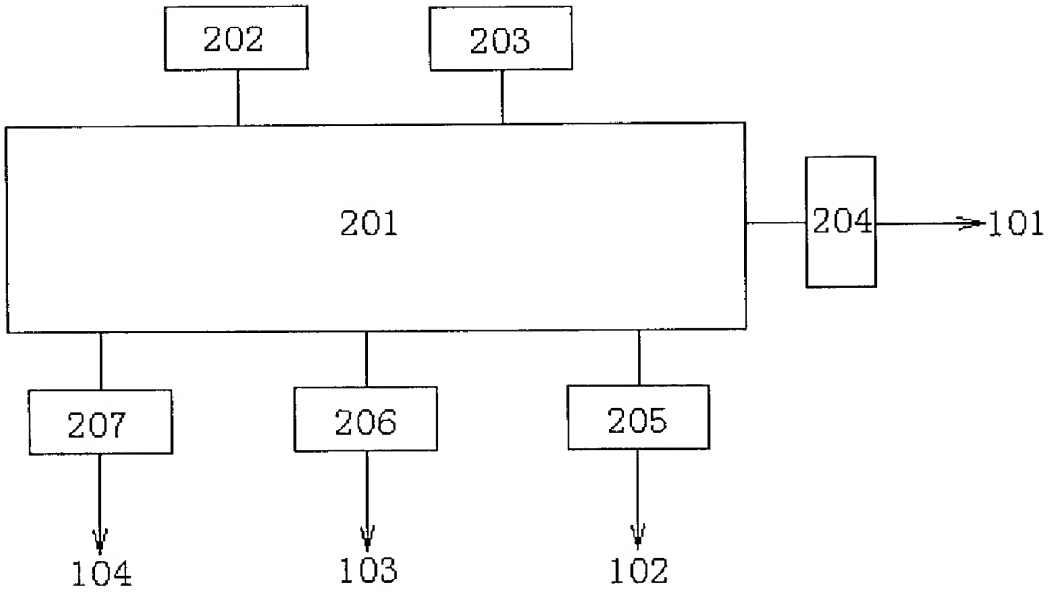



图2

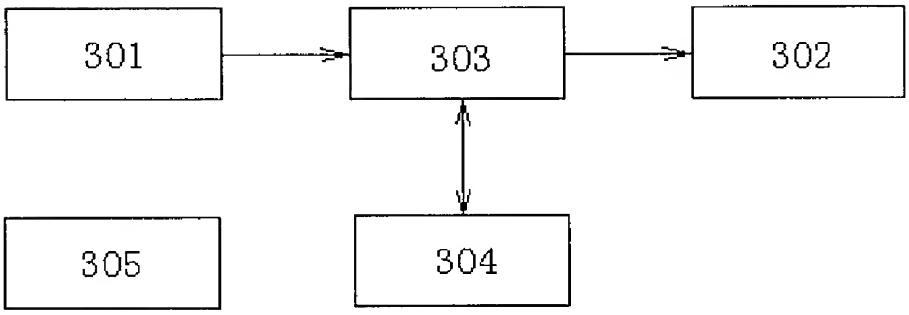



图3

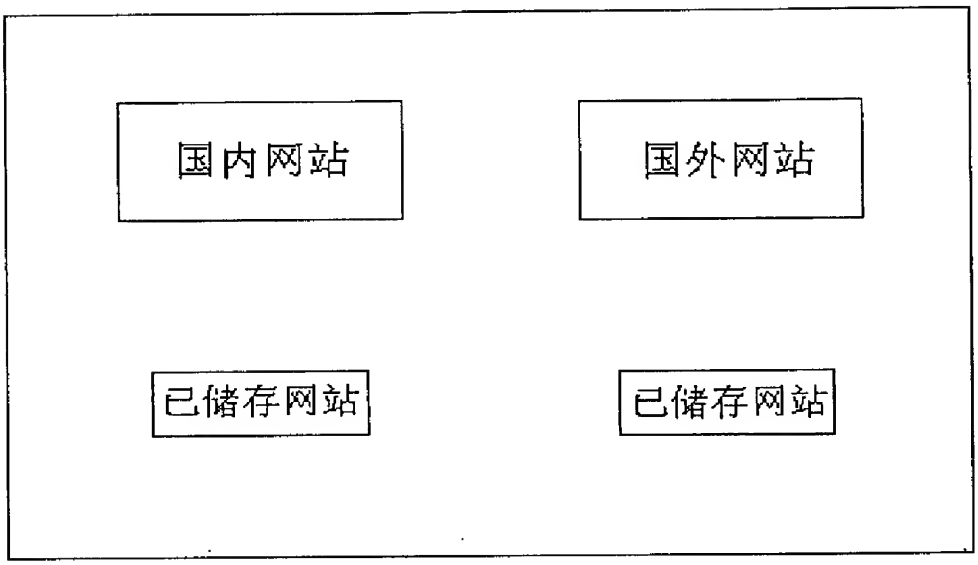



图4

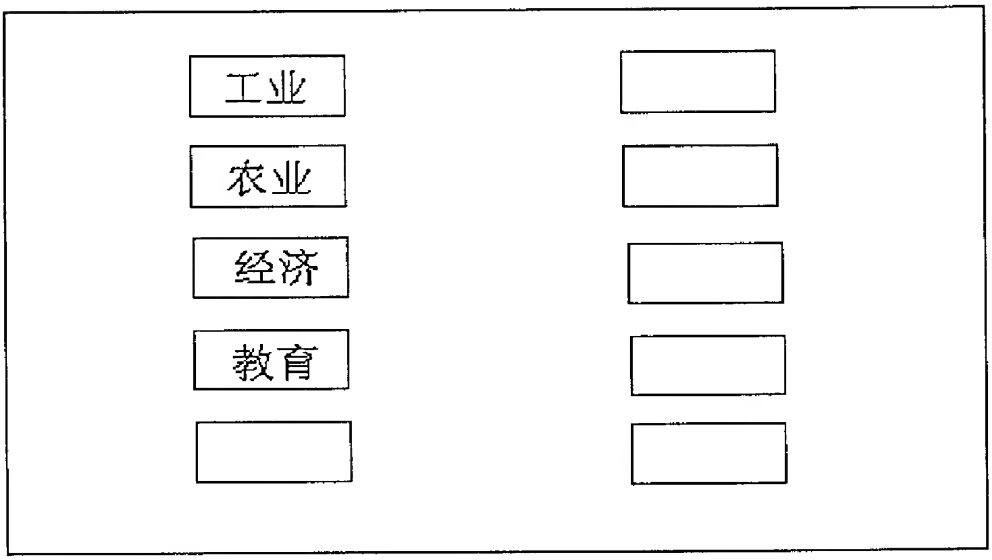



图5

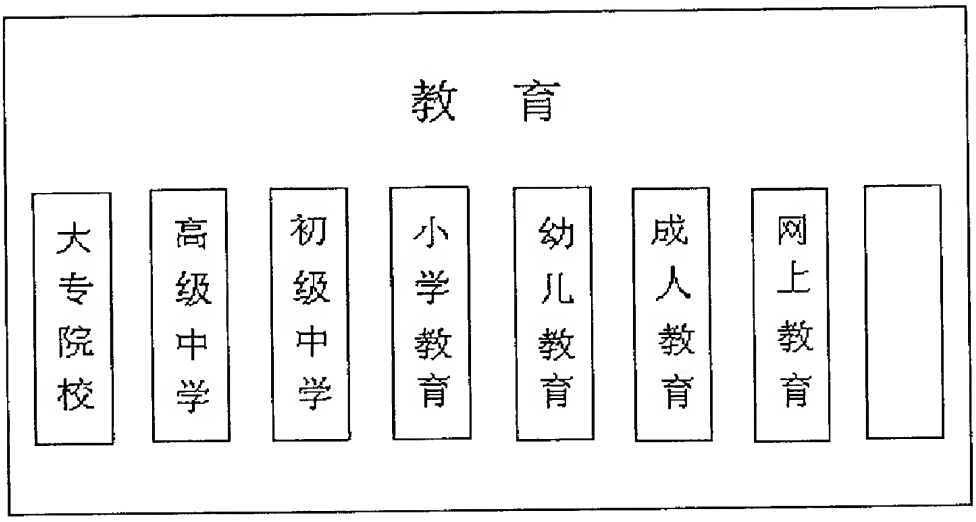

教 育
大专院校
高级中学
初级中学
小学教育
幼儿教育
成人教育
网上教育

图6

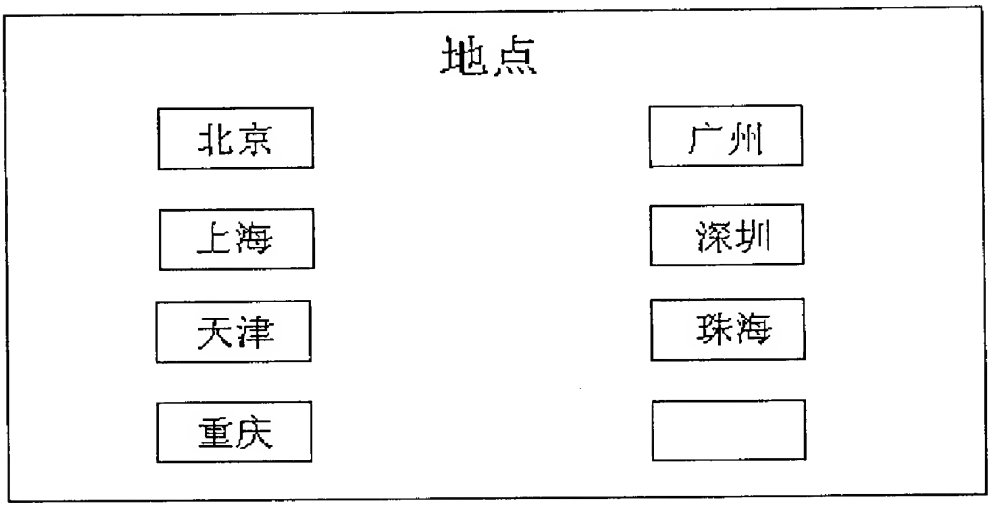

地点
北京
上海
天津
重庆
广州
深圳
珠海

图7

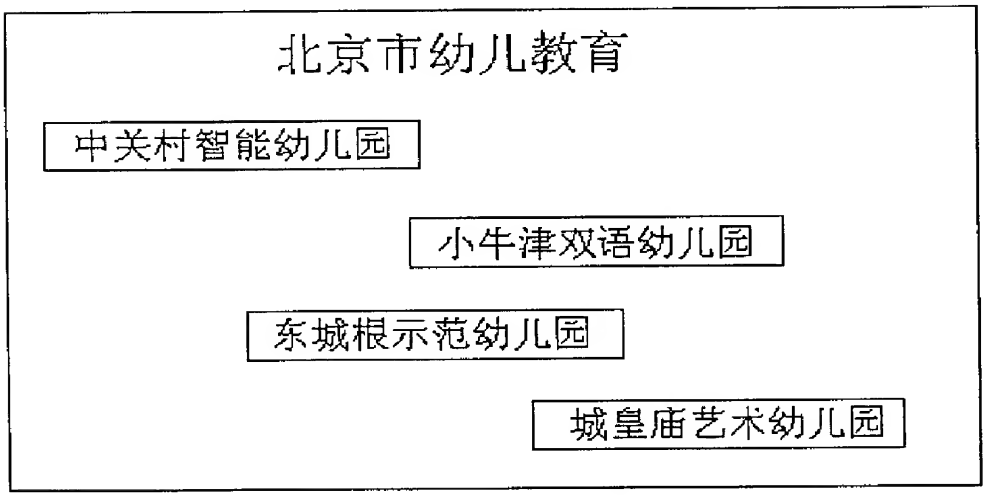

北京市幼儿教育
中关村智能幼儿园
小牛津双语幼儿园
东城根示范幼儿园
城皇庙艺术幼儿园

图8

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# A PUSH-TO-TALK TV ON-LINE ACCESS SYSTEM

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| Inventor: | Zhengguo Zhang |
| Applicant: | Zhengguo Zhang<br>604 Building 8, Lane 9, Songyuan South<br>Baoan South Road<br>Luohu District, Shenzhen,<br>Guangdong Province, 518001 |
| Agent: | Weigang Guo<br>Shuntianda Patent and Trade Mark Agency Co. Ltd. of Shenzhen |

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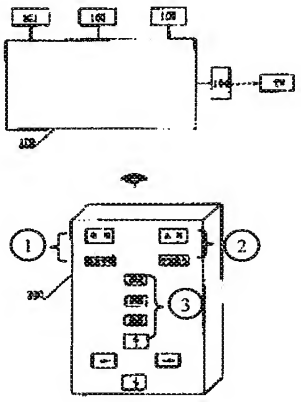
| Claims: | 2 pages |
| Description: | 7 pages |
| Attached drawings: | 4 pages |

Abstract

A push-to-talk TV on-line access system, which is composed of a conversion interface device with an interface for a network access facility and an interface for a television and a remote control unit capable of data communications with the conversion interface device, operated in a push-to-talk mode, wherein when the "On-line" key is pressed down using the remote controller, connection to the internet can be accomplished; meanwhile, a pre-set classification of home pages is displayed on the television, and the home page to access is

specifically selected through selection in an editing operation; because the accessible home pages described are organized through a tree structure, the content of the accessible network is controllable; meanwhile, new website addresses can be added and stored as a supplement, thus making it possible for the internet to go into every home through the television.




Key: 1 Television
English alphabet
2 Getting on-line
Chinese Input
3 Exit
Return
Confirmation

Claims

1. A push-to-talk TV on-line access system, which is characterized by the fact that it is composed of a conversion interface device with an interface for a cable TV line, an interface for a telephone line or wireless reception interface and various kinds of interfaces, and a remote control unit capable of data communications with the described conversion interface device, and in the described conversion interface device, there is a video/radio output port for connection to a television, and the described conversion interface device is composed of a CPU and a remote control reception unit that is connected to the input port of said CPU, the described CPU is linked with a memory unit, and the input/output ports of the described CPU are respectively connected through their respective modules to the interface of the cable TV line, the interface of the telephone line or the wireless reception interface, and meanwhile, are connected through a digital (IP)/video (TV) conversion unit to the television connection port, and upon receipt of a

signal from the remote control, the described conversion interface device executes the following steps: Analyzes the command of the remote controller, displays an initial picture if it is an "on-line" command, establishes connection to the main website through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces and converts the home page of the main website to signals that the television is capable of displaying, and sends them to the television through the video/radio interface; if it is a confirmation command, it then sends the website that the current position of the cursor corresponds to through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces to the internet; and if it is an editing command, it then moves the position of the cursor in accordance with the content of the command and connects the website link that the cursor corresponds to after moving and sending the website to which the current position of the cursor corresponds through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces to the internet, and exchanges information with the internet through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and the various kinds of interfaces described.

2. A push-to-talk TV on-line access system as described in Claim 1, which is characterized by the fact that the home page on the described main website is directed to the link to the home page of the next stage in accordance with a certain rule of classification and arranged in sequential order.

3. A push-to-talk TV on-line access system as described in Claim 1, which is characterized by the fact that the home page of the next stage linked with the described main website is directed to the link to the home page of the next stage in accordance with a certain rule of classification and arranged in sequence, and analogously with this until entry to the required website.

4. A push-to-talk TV on-line access system as described in Claim 1, which is characterized by the fact that the home page address of the described main website can be pre-stored or added to the memory unit of the described conversion interface device.

5. A push-to-talk TV on-line access system as described in Claim 1, which is characterized by the fact that the described remote controller includes a save key, and when said key is pressed down, the current website will be saved in the memory unit by the conversion interface device, and can be called directly from the memory unit during the next access.

6. A push-to-talk TV on-line access system as described in Claim 1, which is characterized by the fact that the described remote controller also includes a "television" function key, and when said key is pressed down, the connection to the website will be switched off by the described conversion interface device so that the television (TV) working mode is restored.

7. A push-to-talk TV on-line access system as described in Claim 1, which is characterized by the fact that the described remote controller also includes font/Chinese character input keys.

8. A push-to-talk TV on-line access system as described in Claim 1, which is characterized by the fact that the described editing command is composed of upper, lower, left, and right keys, last page and next page commands and return to the home page and keys set up in accordance with the actual need.

Description

The present invention relates to the technology of network interfaces and television, and more specifically, to a system that can greatly simplify the access operation to the internet through a television.

The internet is becoming increasingly correlated with living and work, and in order to accomplish access to the internet through a television with existing technology, in addition to the requirement of the hardware of an set-top box on the top of the television, in the process of use the user is also required to memorize a series of complicated steps of operation, thus making it impossible for those lacking knowledge of computers or those that are less educated to access the internet conveniently.

The objective of the present invention is to provide a one push-to-talk television on-line access system to access the internet through television. With this push-to-talk television on-line access system, the above-mentioned disadvantages of the existing technology can be overcome. Using this system to get on line, the steps of operation can be greatly simplified, thus allowing networked life to really go into many thousands of homes.

The objective of the present invention is accomplished in such a way that constructed there is a push-to-talk television on-line access system, which is composed of a conversion interface device with an interface for a cable TV line, an interface for a telephone line or wireless reception interface and various kinds of interfaces, a remote control unit capable of data communications with the described conversion interface device, and in the described conversion interface device there is a video/radio output port to connect to the television, and the described conversion interface device is composed of a CPU and a remote control reception unit that is connected to the input port of said CPU, the described CPU is linked with a memory unit, and the input/output ports of the described CPU are respectively connected through their respective modules to the interface of the cable TV line, the interface of the telephone line or the wireless reception interface, and meanwhile, are connected through the digital/video conversion unit to the television connection port, and upon receipt of a signal from the remote control, the described conversion interface device executes the following steps: analyzes the command of the

remote controller, displays an initial picture if it is an "on-line" command, establishes connection with the main website through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces and converts the home page of the main website to signals that the television is capable of displaying, and sends them to the television through the video/radio interface; if it is a confirmation command, it then sends the website that the current position of the cursor corresponds to through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces to the internet; and if it is an editing command, it then moves the position of the cursor in accordance with the content of the command, and connects the website link that the cursor corresponds to after moving and sending the website to which the current position of the cursor corresponds through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces to the internet, and exchanges information with the internet through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and the various kinds of interfaces described, wherein, each displayed information item and data item is temporarily pre-stored in the memory of the conversion interface device.

A push-to-talk television on-line access system as provided in accordance with the present invention, which is characterized by the fact that the home page on the described main website is directed to the link to the home page of the next stage in accordance with a certain rule of classification and arranged in sequential order.

A push-to-talk television on-line access system as provided in accordance with the present invention, which is characterized by the fact that the home page of the next stage linked with the described main website is directed to the link to the home page of the next stage in accordance with a certain rule of classification and arranged in sequential order, and analogously like this until entry to the required website.

A push-to-talk television on-line access system as provided in accordance with the present invention, which is characterized by the fact that the home page address of the described main website can be pre-stored or added to the memory unit of the described conversion interface device.

A push-to-talk television on-line access system as provided in accordance with the present invention, which is characterized by the fact that the described remote controller includes a save key, and when said key is pressed down, the current website will be saved in the memory unit by the conversion interface device, and can be called directly from the memory unit during the next access.

A push-to-talk television on-line access system as provided in accordance with the present invention, which is characterized by the fact that the described remote controller also

includes a "television" function key, and when said key is pressed down, the connection to the website will be switched off by the described conversion interface device so that the television (TV) mode is restored.

A push-to-talk television on-line access system as provided in accordance with the present invention, which is characterized by the fact that the described remote controller also includes font/Chinese character input keys.

A push-to-talk television on-line access system as provided in accordance with the present invention, which is characterized by the fact that the described editing command is composed of upper, lower, left, and right keys, last page and next page commands and return to the home page, and each described editing command corresponds to a key on the remote controller.

Execution of the present invention of the push-to-talk television on-line access system offers the following advantages: with operation in a push-to-talk mode, when the "On-line" key is pressed down through the remote controller, connection to the internet can be accomplished; meanwhile, the pre-set classification of home pages is displayed on the television, and the home page to access is specifically selected through selection in the editing operation; because the described accessible home pages are organized through a tree structure, the accessible content of the network is controllable; meanwhile, new website addresses can be added and stored as a supplement. Execution of the system of the present invention enables entry of the internet into every home through the television.

The following is a further description of the characteristics of the present invention, in association with the attached drawings and embodiments, and of the attached drawings:

Figure 1 is a simple sketch of an embodiment of the push-to-talk television on-line access system of the present invention;

Figure 2 is a block view of the composition of the conversion interface device in the push-to-talk television on-line access system of the present invention;

Figure 3 is a block view of the composition of the remote controller in the push-to-talk television on-line access system of the present invention;

Figures 4–8 are schematic diagrams of the process of access to the internet using the push-to-talk television on-line access system of the present invention.

As is shown in Figure 1, the push-to-talk television on-line access system of the present invention is composed of two parts, the hardware and the software, wherein the hardware part is composed of a conversion interface device 100 and a remote controller 200, and the two are associated, mainly to solve the problems of network access, interactive dialog, and data storage; and associated with the software, the specific functions accomplished include: 1) to provide access to a gateway website in the internet through a telephone line, cable TV broad band, or

wireless access and various ways of internet access, and or to provide the function of access to several central websites; 2) to pre-store the addresses of other websites or store addresses of additional new websites; and 3) entry to a specific web page for corresponding browsing through simple directional operation, and in accordance with searching of the website.

1. The conversion interface device

As is shown in Figure 1, the conversion interface device 100 is composed of a cable TV line interface 101, telephone line interface 102 or wireless reception interface 103 for connection to the internet, and it is also composed of a video/radio output port 104 for connection to a television; as is shown in Figure 2, the conversion interface device is also composed of a CPU 201 and a remote control reception unit 202 that is connected to an input port of said CPU 201, the described CPU is linked with a memory unit 203, and the input/output ports of the described CPU 201 are connected through a conversion unit 204 to the cable TV line interface 101, through a conversion unit 205 to the telephone line interface 102, through a conversion unit 206 wireless reception to the interface 103, and through a digital/video conversion unit 207 to the television connection port 104.

2. Remote controller

The remote controller is an important link in the system of the present invention to accomplish interactive dialogue, and it is used for sending a user instruction to the conversion interface device. This interface device for data communications with the conversion interface device, as is shown in Figure 3, is set with a key 301, an infrared transmission unit 302, a CPU 303 and a memory unit 304 and a battery power supply unit 305; and the key unit 301 is composed of 1) functional indication keys such as "On-line", "TV", etc.; 2) mode switch keys, such as "Alphabet", "Chinese characters", "Exit", "Return", etc.; 3) screen editing keys, such as "←", "↑", "→", and "↓", etc. When connected to the working power supply, after one of the keys on the panel has been pressed down, the CPU will, based on the position of the key pressed down, retrieve the corresponding code from the memory unit, and transmit it through the infrared transmission unit.

3. Software

Through the software on the conversion interface and the remote controller, the system of the present invention can perform the following functions.

(1) The mode switch

When the conversion interface device receives the signal of the "On-line" command from the remote controller, it will display an initial picture as shown in Figure 4, and through the interface of the cable TV line, the interface of a telephone line or the interface of wireless reception and various kinds of interfaces, set up for connection with a major website and convert the home page of the major website to signals that can be displayed on the television, send them to the television through the video/radio interface, and display them on the television.

When the conversion interface device receives the signal of the "Television" command from the remote controller, it will switch off the connection to the internet, so that the television returns to the "Radio Frequency" or "AV" mode before accessing the internet.

(2) Network access functions

A) Screen editing command

There is a process of searching for a target in network access, and this process is accomplished through pressing down a screen editing directional command on the remote controller, here mainly through the up arrow, down arrow, left arrow, and right arrow, in association with the content displayed on the screen. When the conversion interface device receives the signal of the screen editing command from the remote controller, it will then move the position of the cursor in accordance with the content of the command, and connect the website link to which the cursor corresponds after moving and send the website to which the current position of the cursor corresponds through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces to the internet, and exchange information exchange with the internet through the interface of the cable TV line, the interface of the telephone line or the wireless reception interface and the various kinds of interfaces described.

B) Site, page return command

When the "Return" key on the remote controller is pressed down to give the command to return to a site or a page, it will go back to the previous page or the previous website.

C) Access confirmation command

For selecting access options on the screen through the remote controller, to select completion, press down the "Confirmation" key on the remote controller, and after the conversion interface device identifies the confirmation command, it will send the website to which the existing position of the cursor corresponds to the internet through the interface of the

cable TV line, the interface of the telephone line or the wireless reception interface and various kinds of interfaces.

4. Internet support

In order to accomplish the functions of the system of the present invention, the design of an internet support system is required. First, it requires a top-level website home page, on which the website can be classified into two types, a domestic website and a foreign website. In other words, the top-level web page is arranged in accordance with the domestic and foreign with a link directing to the domestic website and a link directing to a foreign website. And the home page on the website (page) of each other level is arranged in accordance with a certain rule of classification and in sequence with a link directing to the home page of the next level. The home page of the next level linked by a described major website is arranged in accordance with a certain rule of classification and in sequence with the link directing to the home page of the next level, and analogously with this until entry to the required website. In this, the address of the home page of the top-level major website can be pre-stored or added in the memory of the described conversion interface device.

5. Others

A save key may also be set up in the remote controller, and when said key is pressed down, the current website will be saved in the memory unit by the conversion interface device, and can be called directly from the memory unit during the next access, thus enhancing the access speed.

The described remote controller also includes font/Chinese character input keys, for coordination with optional keys on the television screen and the remote controller screen, to input English numerals and Chinese.

For example, if the screen display is as shown in Figure 4, when the cursor is moved to the "Domestic Website" and the "Confirmation" key is pressed down, the screen displayed in Figure 5 appears. At this time, if the remote controller is operated, and the cursor is moved to "Education" and the "Confirmation" key is pressed down, then, the screen displayed in Figure 6 appears. Then, if through operating the remote controller, the cursor is moved to "Young Children Education" and the "Confirmation" key is pressed down, the screen of address selection displayed in Figure 7 appears, and if "Beijing" is then selected, the home page of the website displayed in Figure 8 appears.

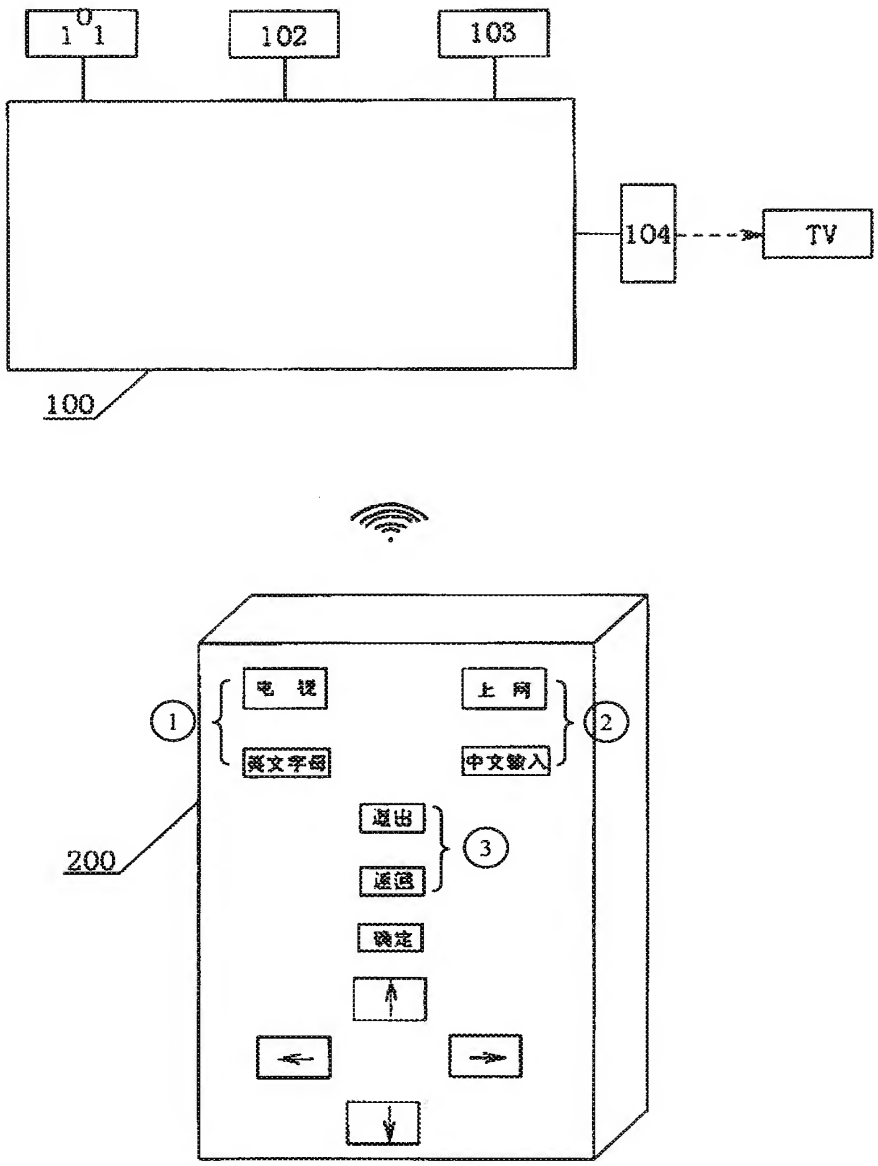



Figure 1

Key: 1 Television
English alphabet
2 Getting on-line
Chinese input
3 Exit
Return
Confirmation

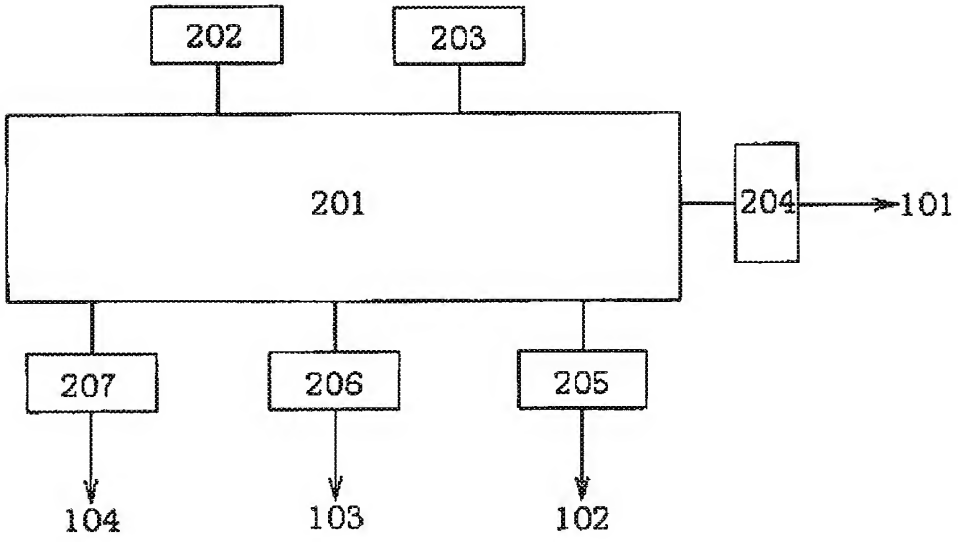



Figure 2

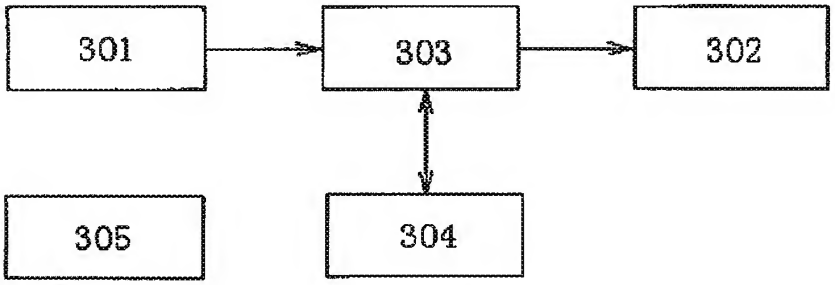



Figure 3

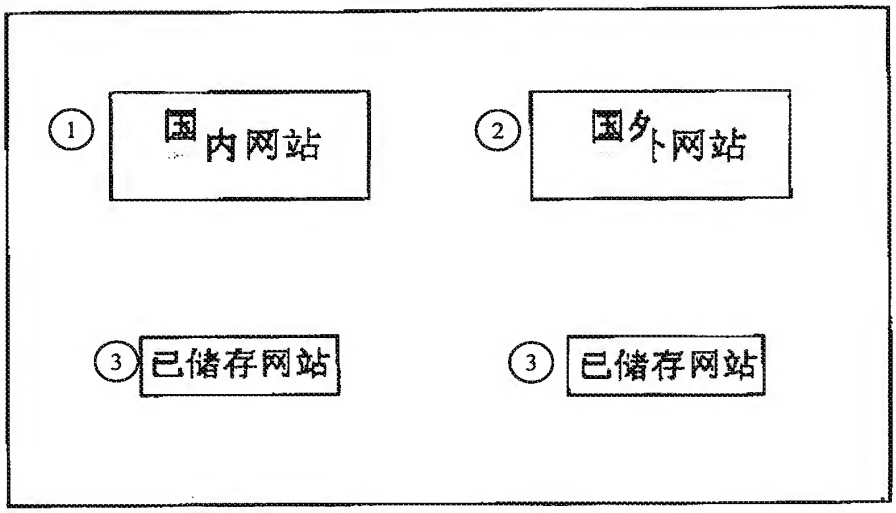



Figure 4

Key: 1 Domestic website
2 Foreign website
3 Stored website

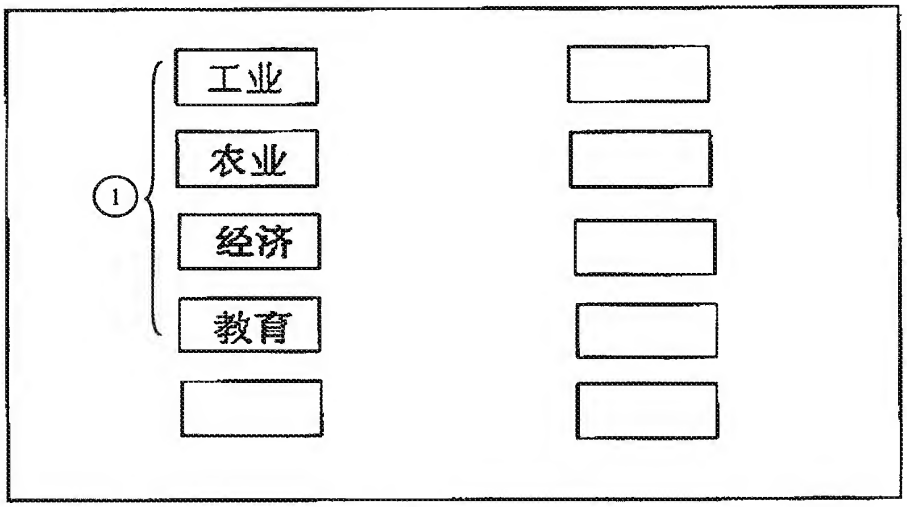



Figure 5

Key: 1 Industry
Agriculture
Economy
Education

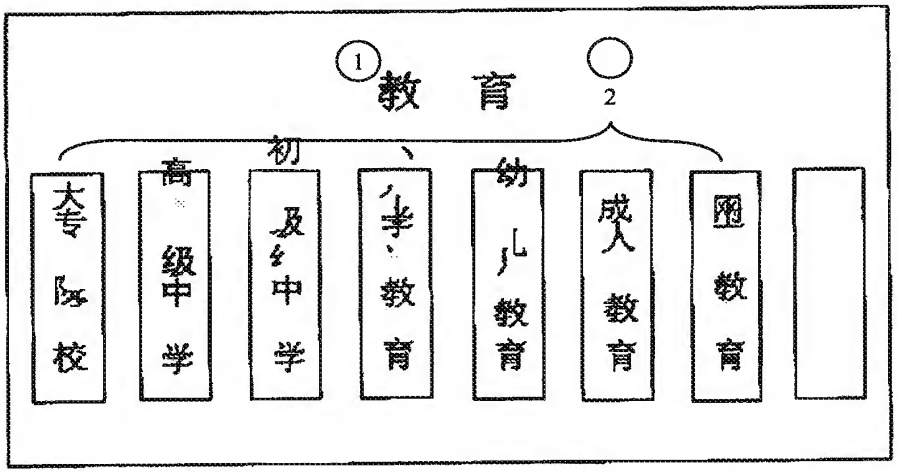



Figure 6

Key: 1 Education
2 Universities and colleges
High schools
Middle schools
Elementary schools
Young Children's education
Adult education
On-line education

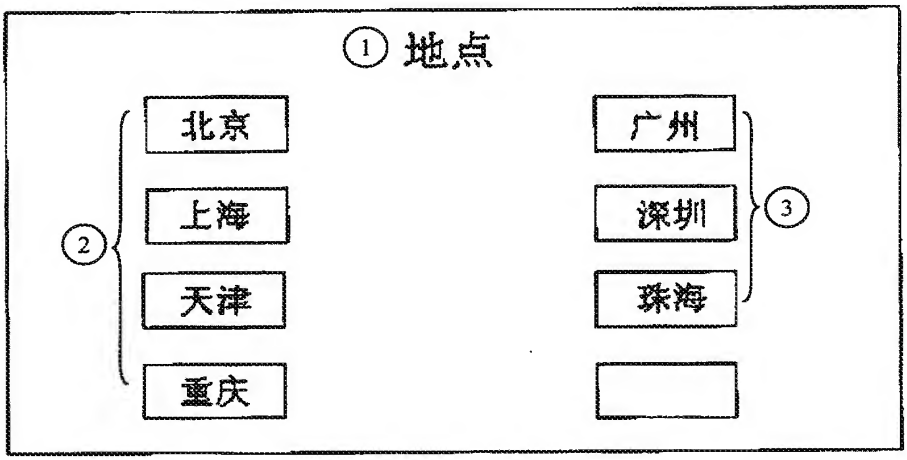



Figure 7

Key: 1 Sites
2 Beijing
Shanghai
Tianjin
Chongqing
3 Guangzhou
Shenzhen
Zhuhai

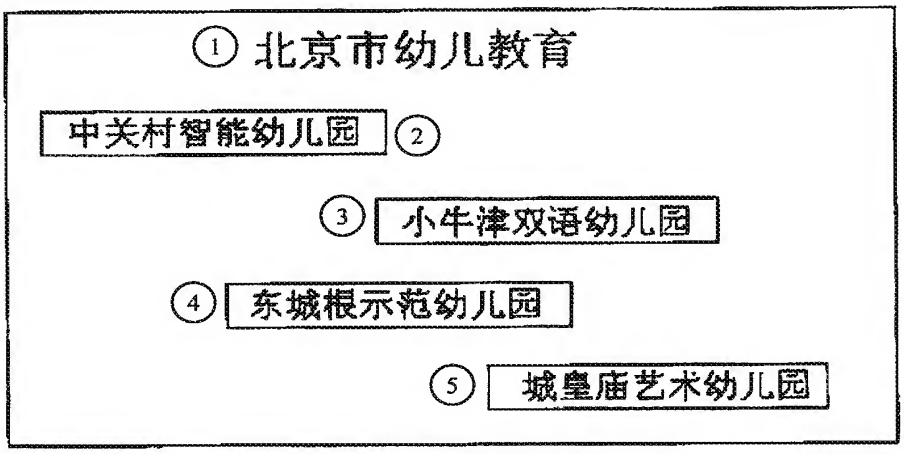



Figure 8

Key: 1 Young Children's Education in Beijing
2 Intelligent Kindergarten at Zhongguancun
3 Little Oxford Bilingual Kindergarten
4 Dongchenggen Exemplary Kindergarten
5 Chenghuangmiao Kindergarten of Arts